

AMENDMENTS TO THE CLAIMS

The listing of claims provided below will replace all prior versions, and listings, of claims in the application.

Listing of Claims

1-38. (Canceled)

39. (New) An *in vitro* method for producing mature dendritic Langerhans cells, said method comprising:

a. culturing peripheral blood monocytes in a medium containing mammalian platelets;

b. incubating the culture at about 30°C to about 40°C for a period sufficient to enable formation of mature dendritic Langerhans cells; and

c. analyzing the cultured cells for the appearance of dendritic processes and markers associated with dendritic Langerhans cells,

wherein the presence of dendritic morphology and processes and reactivity to anti-CD1a, anti-CD80, and anti-CD83 monoclonal antibodies indicates growth of mature dendritic Langerhans cells.

40. (New) The method of claim 39 wherein the medium omits an exogenous cytokine.

41. (New) The method of claim 40, wherein the exogenous cytokine is granulocyte macrophage colony stimulating factor or interleukin-4.

42. (New) The method of claim 39 wherein the medium comprises RPMI-1640.

43. (New) The method of claim 39 wherein the cells are cultured for a period of about 2 to about 8 days.

44. (New) The method of claim 39 wherein the medium further comprises fetal calf serum.
45. (New) The method of claim 44, wherein the medium contains at least about 2% fetal calf serum.
46. (New) The method of claim 45, wherein the fetal calf serum is about 10%.
47. (New) The method of claim 39 wherein human platelets are added to the medium to develop mature dendritic Langerhans cells.
48. (New) The method of claim 39 further comprising analyzing the mature dendritic Langerhans cells produced by flow cytometry.
49. (New) The method of claim 39 wherein the platelets and the peripheral blood monocytes are derived from the same species.
50. (New) The method of claim 49 wherein the peripheral blood monocytes, the platelets, and the mature dendritic Langerhans cells produced are human.
51. (New) The method of claim 39 wherein the platelets are from rat and peripheral blood monocytes are from mouse.
52. (New) An *in vitro* method for producing mature dendritic Langerhans cells, said method comprising:
- a. culturing a preparation of bone marrow cells in a medium containing mammalian platelets;
 - b. incubating the culture at about 30°C to about 40°C for a period sufficient to enable formation of mature dendritic Langerhans cells; and
 - c. analyzing the cultured cells for the appearance of dendritic processes and markers associated with dendritic Langerhans cells,

wherein a subpopulation of the culture differentiates into dendritic Langerhans cells, and wherein the presence of dendritic morphology and processes and reactivity to anti-CD1a, anti-CD80, and anti-CD83 monoclonal antibodies indicates growth of mature dendritic Langerhans cells.

53. (New) The method of claim 52 wherein the medium omits an exogenous cytokine.
54. (New) The method of claim 53, wherein the exogenous cytokine is granulocyte macrophage colony stimulating factor or interleukin-4.
55. (New) The method of claim 52 wherein the medium comprises RPMI-1640.
56. (New) The method of claim 52 wherein the cells are cultured for a period of about 2 to about 8 days.
57. (New) The method of claim 52 wherein the medium further comprises fetal calf serum.
58. (New) The method of claim 57, wherein the medium contains at least about 2% fetal calf serum.
59. (New) The method of claim 58, wherein the fetal calf serum is about 10%.
60. (New) The method of claim 52 wherein human platelets are added to the medium to develop mature dendritic Langerhans cells.
61. (New) The method of claim 52 further comprising analyzing the mature dendritic Langerhans cells produced by flow cytometry.
62. (New) The method of claim 52 wherein the platelets and the preparation of bone marrow cells are derived from the same species.
63. (New) The method of claim 62 wherein a preparation of bone marrow cells, the platelets, and the mature dendritic Langerhans cells produced are human.

64. (New) The method of claim 52 wherein the platelets are from rat and the preparation of bone marrow cells are from mouse.